

REMARKS

Claims 1-67 are all the claims pending in the application. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

Election/Restriction

The Examiner acknowledged Applicants' election of Species I (Figs. 1-2(b)), and Sub-species J (Figs. 16(a)-(c)), as made on May 17, 2004. However, the Examiner considered only claims 1-3, 10, 48, 51-52, and 67, and withdrew claims 11-12 and 40-43, as directed to Species I, as well as withdrew claims 20-23, 36, and 38 as directed to Sub-species J. Applicants respectfully request reconsideration of which claims are withdrawn.

Specifically, Applicants assert that the Examiner's reasons for distinguishing between Species I-IV and Sub-species A-S are unclear. At the time of the May 17 election, it appeared that the Examiner would allow claims directed to the compression film as in the elected Species, and claims directed to the compression film as in the elected Sub-species. Thus, Applicants respectfully request that the Examiner clarify the election requirement.

Now, in light of the August 11, 2004 Office Action, it appears that the Species I-IV may be drawn to different structures of seal plate 20, whereas Sub-species A-S may be drawn to different embodiments of the compression film having a compressive stress. The embodiments of seal plate, as in Species I-IV, are not disclosed as being specific to the embodiments of compression film having a compressive stress and *vice versa*. Accordingly, by electing the Species I (Figs. 1-2(b)), and Sub-species J (Figs. 16(a)-(c)), Applicants should be able to have examined all of the claims directed to the seal plate embodiment as in Figs 1-2(b) (Species I) and the claims directed to the compression film having a compressive stress as in (Figs. 16(a)-(c) (Sub-species J). Thus, in addition to the claims already examined, claims 11-12, 20-23, 36, 38, and 40-43, should be examined in accordance with Applicant's election.

Claim Rejections - 35 U.S.C. § 102

The Examiner rejected claims 1-3, 10, 51-52/(1-3, and 10), and 67, under §102(b) as being anticipated by EP 786 345 to Hashizumi et al. (hereinafter Hashizumi). Applicants

respectfully traverse this rejection because Hashizumi fails to disclose each of the elements as set forth in the claims.

Particularly, Hashizumi fails to disclose a compression film having a part thereof removed in an area opposed to a pressure generation chamber as set forth in claim 1. Instead, in Fig. 12, as relied upon by the Examiner, it is layer VP that includes a compressive stress, but does not include a portion thereof removed in an area opposed to a pressure generation chamber. In Fig. 15, also relied upon by the Examiner, although layer VP includes a portion thereof removed in an area opposed to a pressure generation chamber, that layer is not disclosed as having a compressive stress therein.

First, Applicants' arguments as set forth in the Amendment filed on January 5, 2004, pages 12-15, are still pertinent and, therefore, are incorporated herein by reference.

Second, the Examiner's interpretation of Hashizumi is mistaken. The Examiner relies on col. 16, lines 20-25 in asserting that the layer VP in Fig. 15 and the layer VP in Fig. 12 are formed by the same processes, are made of the same material, and on the same substrate and, therefore must have the same characteristic properties.¹ Applicants disagree for at least the following reasons.

The layers VP in Figs. 15 and 12 are not necessarily made by exactly the same processes and under the same conditions and, therefore, do not necessarily have the same properties.

Instead, in col. 16, on the lines relied upon by the Examiner, Hashizumi states that in the Fig. 15 "embodiment, the same steps as those previously described with reference to Figs. 16-26 are executed." But the "steps" as described with reference to Figs. 16-26, are very general in nature and include a considerable amount of variability. For example, in connection with the layer VP, Hashizumi discusses one particular embodiment in col. 12, lines 47-54, and then states that the "film formation method is not limited to it and the thermal oxide film may be, for example, a silicon oxide film formed by wet oxidation or a silicon oxide film formed by a reduced pressure chemical vapor phase growth method, an atmospheric pressure chemical vapor

¹ Office Action at page 5, lines 10-16.

phase growth method, or an electron cyclotron resonance chemical vapor phase growth method.”² And the existence, as well as type, of stress is highly dependent upon the manner in which the film is made as well as on the annealing processes to which it is subject. See, for example, Applicants’ Appeal Brief as filed on June 4, 2003, at page 7, line 8 - page 9, line 10, and the articles cited therein. Additionally, the Fig. 12 embodiment includes an extra layer BE, which is not included in the Fig. 15 embodiment, therefore making it likely that these embodiments are subject to different process steps. Accordingly, because the embodiments of Figs. 12 and 15 are not necessarily made according to exactly the same processes, they do not necessarily include the same properties, i.e., condition of internal stress.

Further, Hashizumi specifically discusses the internal stresses of layer VP when discussing the embodiment of Fig. 12, whereas he is notably silent as to any internal stressing in the layer VP when discussing the embodiment of Fig. 15. Compare Hashizumi at col. 8, line 29 - col. 10, line 11 with col. 16, line 21 - col. 17, line 18. Moreover, Hashizumi fails to identify what processes lead to the compressive stress in Fig. 12, let alone that those same processes are used in the Fig. 15 embodiment.

In light of the above, it cannot be said that the Fig. 15 embodiment “must” include a compressive stress, as is necessary to meet the Examiner’s claim that this embodiment “inherently” includes a compressive stress as does the disparate embodiment discussed in connection with Fig. 12.

For at least any of the above reasons, Hashizumi fails to anticipate

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 48 and 51-52/48 would be allowed if rewritten in independent form. However, because of the belief that claim 1 is allowable as written, Applicants have not written claims 48 and 51-52/48 in independent form at this time.

² Hashizumi at col. 12, line 54 - col. 13, line 2.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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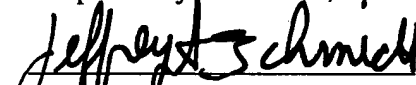
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